



## SEQUENCE LISTING

<110> Klessig, Daniel F.  
Kumar, Dhirenda

<120> NOVEL SALICYLIC ACID-BINDING PROTEIN  
ENCODING NUCLEIC ACIDS, SABP2, AND METHODS OF USE THEREOF

<130> 3670-PO2652WO

<140> 10/780,002

<141> 2004-02-17

<150> PCT/US02/26312

<151> 2002-08-16

<150> 60/312,863

<151> 2001-08-16

<160> 58

<170> FastSEQ for Windows Version 3.0

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<211> 1079

<212> DNA

<213> Nicotiana tabacum

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<211> 260

<212> PRT

<213> Nicotiana tabacum

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 <212> PRT  
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 Cys Gly Pro Glu Glu Tyr Glu Leu Ala Lys Met Leu Thr Arg Lys Gly  
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 <211> 263  
 <212> PRT  
 <213> Arabidopsis thaliana

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<221> variation  
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 g, n at position 9 is c or t, n at position 12 is  
 a or g, n at position 15 is a or c or t, n at  
 position 18 is c or t

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<210> 9  
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<400> 9  
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18

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<210> 11  
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<212> PRT  
<213> Nicotiana Tabacum

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<210> 12  
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<213> Nicotiana Tabacum

<220>  
<221> VARIANT  
<222> (0)...(0)  
<223> Xaa at position 1 can be any amino acid.

<400> 12  
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1 5 10

<210> 13  
<211> 14  
<212> PRT  
<213> Nicotiana Tabacum

<220>  
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<222> (0)...(0)  
<223> Xaa at position 2 can be any amino acid.

<400> 13  
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<210> 14  
<211> 15  
<212> PRT  
<213> Nicotiana Tabacum

<220>  
<221> VARIANT  
<222> (0)...(0)  
<223> Xaa at position 6 can be Tryptophan or Isoleucine.

<400> 14  
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<210> 15  
<211> 15  
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<213> Nicotiana Tabacum

<220>  
<221> VARIANT

<222> (0)...(0)

<223> Xaa at position 11 can be Phenylalanine or  
Glutamic Acid.

Xaa at position 13 can be Methionine or Proline

<400> 15

Thr	Pro	Ala	Glu	Asn	Thr	Leu	Asp	Thr	Gln	Xaa	Leu	Xaa	Tyr	Gly
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<213> Nicotiana Tabacum

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<222> (0)...(0)

<223> Xaa at position 1 can be any amino acid.

<400> 16

Xaa	Pro	Ala	Glu	Asn	Trp	Leu	Asp	Thr	Gln	Phe	Leu	Pro	Tyr
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<210> 17

<211> 10

<212> PRT

<213> Nicotiana Tabacum

<220>

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<222> (0)...(0)

<223> Xaa at position 4 is preferably Glutamic Acid or  
Asparagine, but can be any amino acid.

<221> VARIANT

<222> (0)...(0)

<223> Xaa at position 6 is preferably Leucine or  
Glycine, but can be any amino acid.

<221> VARIANT

<222> (0)...(0)

<223> Xaa at position 8 is preferaly Serine or  
Threonine, but can be any amino acid.

<400> 17

Tyr	Pro	Glu	Xaa	Pro	Xaa	Thr	Xaa	Met	Phe
1				5					10

<210> 18

<211> 11

<212> PRT

<213> Nicotiana Tabacum

<400> 18

His	Tyr	Ala	Leu	Phe	Met	Glu	Asp	Leu	His	Lys
1				5					10	

<210> 19

<211> 8

<212> PRT

<213> Nicotiana Tabacum

<220>  
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 <222> (0)...(0)  
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<210> 20  
 <211> 6  
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<400> 20  
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<210> 21  
 <211> 10  
 <212> PRT  
 <213> Nicotiana Tabacum

<400> 21  
 Leu Val Pro Val Asp Val Ser Ile Asp Pro  
 1 5 10

<210> 22  
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 <212> PRT  
 <213> Nicotiana Tabacum

<220>  
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 <222> (0)...(0)  
 <223> Xaa at position 1 is preferably Isoleucine or Tyrosine, but can be any amino acid.

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 Xaa His Phe Tyr Ile Tyr Pro Leu Asn Ser  
 1 5 10

<210> 23  
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 <213> Nicotiana Tabacum

<220>  
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 <223> Xaa at position 1 is preferably Phenylalnine or Tyrosine but can be any amino acid.

<221> VARIANT  
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 <223> Xaa at position 2 is preferably Serine or Alanine but can be any amino acid.

<221> VARIANT  
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 <223> Xaa at position 8 is preferably Aspartic Acid or



Phenylalanine but can be any amino acid.

<221> VARIANT

<222> (0)...(0)

<223> Xaa at position 9 is preferably Glycine or Phenylalanine but can be any amino acid.

<400> 23

Xaa	Xaa	Leu	Tyr	Asp	Phe	Val	Xaa	Xaa	His	Lys
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<210> 24

<211> 10

<212> PRT

<213> Nicotiana Tabacum

<400> 24

Tyr	Val	Thr	Pro	Glu	Asn	Asn	Leu	Tyr	Phe
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<210> 25

<211> 10

<212> PRT

<213> Nicotiana Tabacum

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<221> VARIANT

<222> (0)...(0)

<223> Xaa at position 1 is preferably Isoleucine or Serine but can be any amino acid.

<221> VARIANT

<222> (0)...(0)

<223> Xaa at position 6 is preferably Serine or Glutamine but can be any amino acid.

<221> VARIANT

<222> (0)...(0)

<223> Xaa at position 7 is preferably Phenylalanine or Isoleucine but can be any amino acid.

<400> 25

Xaa	Asp	Tyr	His	Ile	Xaa	Xaa	Glu	Glu	Leu
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<210> 26

<211> 11

<212> PRT

<213> Nicotiana Tabacum

<400> 26

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<210> 27

<211> 12

<212> PRT

<213> Nicotiana Tabacum

<400> 27

Asp	Ile	Asp	Gly	Val	Pro	Glu	Thr	Leu	Asp	Leu	Arg
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1

5

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&lt;210&gt; 28

&lt;211&gt; 6

&lt;212&gt; PRT

&lt;213&gt; Nicotiana Tabacum

&lt;400&gt; 28

Gly Ala Cys His Gly Gly

1

5

&lt;210&gt; 29

&lt;211&gt; 4

&lt;212&gt; PRT

&lt;213&gt; Nicotiana Tabacum

&lt;220&gt;

&lt;221&gt; VARIANT

&lt;222&gt; (0)...(0)

&lt;223&gt; Xaa at position 3 can be any amino acid.

&lt;400&gt; 29

Gly Ser Xaa Gly

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&lt;210&gt; 30

&lt;211&gt; 5

&lt;212&gt; PRT

&lt;213&gt; Nicotiana Tabacum

&lt;220&gt;

&lt;221&gt; VARIANT

&lt;222&gt; (0)...(0)

&lt;223&gt; Xaa at positions 2 and 4 can be any amino acid.

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&lt;210&gt; 31

&lt;211&gt; 6901

&lt;212&gt; DNA

&lt;213&gt; Homo Sapien

&lt;400&gt; 31

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<211> 989

<212> DNA

<213> Arabidopsis Thaliana

<400> 32

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 <212> DNA  
 <213> Arabidopsis Thaliana

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 <211> 837  
 <212> DNA  
 <213> Arabidopsis Thaliana

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 <211> 792  
 <212> DNA  
 <213> Arabidopsis Thaliana

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<210> 36  
 <211> 912  
 <212> DNA  
 <213> Arabidopsis Thaliana

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<210> 37  
 <211> 819  
 <212> DNA  
 <213> Arabidopsis Thaliana

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<210> 38  
 <211> 783  
 <212> DNA  
 <213> Arabidopsis Thaliana

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<210> 39

<211> 834

<212> DNA

<213> Arabidopsis Thaliana

<400> 39

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<210> 40

<211> 771

<212> DNA

<213> Arabidopsis Thaliana

<400> 40

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<210> 41

<211> 901

<212> DNA

<213> Arabidopsis Thaliana

<400> 41

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 <212> DNA  
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 <213> Arabidopsis Thaliana

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<211> 1665  
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<400> 44

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 <211> 1272  
 <212> DNA  
 <213> Arabidopsis Thaliana

<400> 45

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 <213> Arabidopsis Thaliana

<400> 46

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 <212> DNA  
 <213> Arabidopsis Thaliana

<400> 47

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